

Analysis Plan: Ideology and Geographical Proximity in Municipal Policy Attitudes

Removed for Review

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Background

In many advanced democracies, local and urban governments are experiencing electoral and policy conflict that is clearly structured by left-right ideological disagreement. In the United States, municipal policy and spending is responsive to local residents' ideological preferences (Einstein and Kogan, 2016; Tausanovitch and Warshaw, 2014) and municipal voters incorporate candidates' ideological positions into their voting decisions not only in big cities (Boudreau, Elmendorf and MacKenzie, 2015; Holman and Lay, 2021) but also in smaller municipalities (Sances, 2018). In Europe, local party manifestos are structured by left-right ideology (Reuse, 2024; Otjes, 2024) and municipal candidates build ideological coalitions of electoral support (Egner, 2016). Even in Canada, where most large cities involve completely non-partisan local elections, elite and mass policy attitudes are clearly structured by left-right ideology (?) and local voters tend to select ideologically proximate candidates in both mayoral and council elections (Lucas and McGregor, 2021; Lucas, McGregor and Bridgman, 2023). This left-right ideological conflict is both durable and widespread, and it is especially unlikely to abate as cities become increasingly involved in contentious and nationalized policy conflicts in multiple issue domains, such as climate change, drugs and harm reduction, immigrant settlement, and police justice.

Yet these patterns are also puzzling. For decades, urban policy scholars have suggested that important features of urban governance tend to significantly dampen the role of ideology in local politics. Paul Peterson (1981), for example, famously argued that limits on municipal revenue sources, combined with inter-municipal competition for residents and businesses, led municipal governments to focus their attention on non-contentious developmental and allocational issues. Clarence Stone's "regime theory" emphasized that the limited fiscal and jurisdictional capacity of local government leads to policy outputs that are driven less by ideological commitments than by the ability of diverse public and private actors to come together to pursue a common "governing agenda" (Stone, 1989, 1993). Local policy debates tend to mobilize distinctive interests (Anzia, 2022) and create distinctive coalitions of (often privileged) local residents (Einstein, Glick and Palmer, 2019) that may cross-cut ideological coalitions and dampen the influence of left-right ideology on local policy debates and governing decisions.

Perhaps most simply, local politics is just that: *local*. Even in large consolidated cities, local governments' policy decisions have consequences that are invariably more geographically proximate to constituents than is the case in regional or national legislatures. This local context makes policy decisions more tangible and concrete than might be the case for politics at other scales, even when policy domains are the same: immigration

policy is no longer an abstract question of the number of immigrants a country should accept, but is instead a question of how many immigrants a constituent would like in their local community; climate policy is no longer an abstract question of carbon taxes to support active transportation, but is instead a question of replacing local car lanes with bike lanes; and so on. These concrete local decisions engage individuals' interests and identities in ways that might not be the case in a non-local setting (Borwein and Lucas, 2023; Trope and Liberman, 2010).

Moreover, local decisions are not just about whether and how goods or services should be provided, but also about *where*. Municipal policy often involves items that are spatially divisible. Which neighborhood should accommodate newly built social housing? What areas of a city require a stronger police presence? What is the best route for a new transit line? These are the kinds of questions that animate many local political debates. Such debates can become highly contentious as residents of specific neighborhoods mobilize around their geographical self-interest. Research on NIMBYism shows that opposition to the siting of "undesirable" developments – ranging from infill housing and affordable housing (Marble and Nall, 2021; Doberstein, Hickey and Li, 2016) to abortion clinics (Doherty, Garbarski and Shapsis, 2024) to high-voltage transmission lines (Nelson, Swanson and Cain, 2018) – is often subject to geographical proximity effects: the closer the development is to a respondent's home, the more strongly it is opposed. Homeowners are particularly sensitive to the proximate siting of undesirable developments (Marble and Nall, 2021), a phenomenon that many scholars, following the work of William Fischel (2005), attribute to "price anxiety" - the fear that proximate siting of undesirable uses will decrease home values (Hankinson, 2018, but see O'Grady, 2020). More generally, even when policy debates may not directly engage a local resident's personal interests or identities, construal-level theories of psychological distance suggest that individuals are more likely to marshal more concrete and specific arguments and evidence, rather than abstract values or ideological commitments, when considering questions that are more "local" in time or geographic space (Trope and Liberman, 2010).

The literature on NIMBYism and proximity effects thus suggests that the role of ideology in structuring policy preferences may vary across municipal *settings*. While there is strong evidence that both the general public and political elites "think ideologically" about municipal politics in more abstract settings, such as voting decisions and general survey questions, the same individuals may think much *less* ideologically when it comes to the spatial allocation of goods and services at the neighbourhood level. If this is the case, then the relationship between ideology and policy attitudes should be dampened when the same policy issues are framed not in general terms, as is common in survey-

based urban politics research, but in terms of the respondent's own community or neighbourhood. This possibility – that proximity and “local consequences” may dampen the role of ideology in urban politics – is precisely what our study is intended to explore.

In this paper we use a topic sampling experiment, based on a survey of 6,500 respondents from across Canada, to map the ideological structure of policy attitudes across a wide variety of local issues. We then vary the framing of each issue from general to neighbourhood-specific to test whether and how geographical proximity dampens the relationship between ideology and policy attitudes. Our large sample and topic sampling design allow us to explore a range of additional questions, including whether allocational “goods” (locally desirable) and “bads” (locally undesirable) are subject to similar proximity effects, and whether the effects of geographic proximity on policy attitudes are themselves ideologically structured.

If it is true that residents “think ideologically” about municipal issues in general settings such as the ballot box, but not (or not as much) in the local settings of their own neighbourhoods, then this insight may help us to reconcile the “ideological” and the “non-ideological” strands of local and urban politics research. It may also shed new light on the dynamics of local political representation and policy-making, which may be shaped to a significant extent by the prevalence in some policy fields of “mixed signals” from constituents whose attitudes may vary between general and geographically proximate settings.

Hypotheses

Main Hypotheses

As we noted earlier, our analysis follows past research in Canadian and American municipal politics and assumes that citizens' attitudes on municipal policy issues are related to their ideological self-perception. This assumption, however, remains contentious in the local and urban politics literature, and, to our knowledge, has never been tested on as large and diverse a set of municipal policy issues as we include in this study. Our first hypothesis is therefore simply that we *will* find a meaningful relationship between citizens' attitudes and their ideological positions on these issues:

- H1: There is a statistically significant relationship between ideological self-placement and issue attitudes across many municipal issue domains.

Our main theoretical interest is to move beyond the claim that ideology “matters” in local

policy debates (H1), focusing instead on how ideology may be less important in concrete local debates about the geographical allocation of goods and services than in more general settings, such as elections. To test this possibility, we developed a survey experiment (described in more detail below) in which 40 policy issue statements are asked either in general or local terms. As we described earlier, we expect the relationship between ideology and issue positions to be dampened by a local (that is, neighbourhood-specific) framing:

- H2: The relationship between ideology and issue attitudes is weaker when an issue statement is framed in local terms than when the same issue statement is framed in general terms.

Notice that our data might fail to support H2 for two distinct reasons. First, our hypothesis might simply be wrong: local vs. general framing may not prove to be important for understanding the relationship between ideology and issue attitudes. Second, our hypothesis might fail because, for some or all issue questions, there is not a relationship between ideology and issue attitudes in the first place. To account for this possibility, we will test the following alternative hypothesis, restricted to a theoretically pre-defined subset of issue questions:

- H2a: The relationship between ideology and issue attitudes is weaker when an issue statement is framed in local terms than when the same issue statement is framed in general terms, when the analysis is restricted to the issues in the general framing condition for which there is a significant relationship ($p < 0.05$) between ideology and issue attitudes.

We will also explore this relationship by comparing ideological moderates to ideological extremists, on the grounds that ideological extremists will hold more firmly to their positions (Fowler et al., 2023; van Prooijen and Krouwel, 2019). We will carry out this test by estimating our treatment effect within ideological groups: strong ideologues (0-2 and 8-10 on the self-placement scale), moderate ideologues (3-4 and 6-7 on the self-placement scale) and centrists (5 on the self-placement scale).

Exploratory Hypotheses

In addition to our main hypotheses, we will explore several additional possible relationships. First, we want to explore how the allocational desirability helps to explain variation

in the interaction term we hypothesized in H2. This exploratory hypothesis is particularly valuable for disentangling the mechanisms of the “proximity effect” – if this effect is driven primarily by respondents’ self-interest, it should be especially strong when the desirability or undesirability of a proposal is particularly high. If, in contrast, the proximity effect is driven by more psychological mechanisms (as described in construal-level theory), it may be less variable across levels of allocational desirability. We will therefore test the following hypothesis:

- H3: The dampening effect of local framing on ideology (i.e. the size of the interaction term) varies across issue statements. This variation across issue statements is significantly associated with the allocational “goodness” or “badness” of an issue statement.

Second, following well-established findings in the behavioural economics tradition about heightened sensitivity to losses (Kahneman, Knetsch and Thaler, 1991; Rozin and Royzman, 2001), we expect variation in the size of the treatment effect itself:

- H4: The strength of the treatment effect will be larger when proposals are less desirable and smaller when proposals are more desirable. In other words, the relationship between desirability and the treatment effect will be negative.

Finally, the character of the “proximity effect” may vary depending on an individual’s ideology. Anecdotally, individuals on the left tend to moderate their support for redistributive policies when those policies have potentially negative local consequences (e.g. support for a local affordable housing development), and individuals on the right tend to moderate their opposition to new spending when such spending has potentially positive consequences (e.g. support for an expensive new arena in the local community). We will thus explore variation in the size of the treatment effect across respondent types:

- H5: For policy proposals with low desirability, the treatment effect will be strongest among individuals on the ideological left. For policy proposals with high desirability, the treatment effect will be strongest among individuals on the right.

Data and Measures

Outcome: Policy Attitudes

Our principal outcome variable is the respondent’s agreement or disagreement with a municipal policy statement. We developed 40 statements covering six municipal policy

domains, all of which are displayed in Table 1. Following past work by [Einstein and Glick \(2018\)](#), [Bucchianeri et al. \(2021\)](#), and [Lucas \(2024\)](#), we avoid “cheap talk” in policy responses by adding specific consequences for each statement. To our knowledge, this is by far the largest set of municipal policy attitude questions ever asked in a public opinion survey.

Table 1: Survey Items

Item	Variable	General	Proximate	Tradeoff	Domain
1	sochousing	Municipalities should build more subsidized housing, even if it means increased municipal taxes.	My municipality should build more subsidized housing in my neighbourhood, even if it means increased municipal taxes.	Taxes	Housing
2	rehab	Municipalities should build residential facilities for people who are recovering from alcohol or drug addictions, even if it means increased municipal taxes.	My municipality should build a residential facility in my neighbourhood for people who are recovering from alcohol or drug addictions, even if it means increased municipal taxes.	Taxes	Social Service
3	transitfreq	Municipalities should invest in more frequent public transit services, even if it means increased municipal taxes.	My municipality should invest in more frequent public transit service in my neighbourhood, even if it means increased municipal taxes.	Taxes	Transport
4	police	Municipalities should invest in new police officers and vehicles to increase police presence, even if it means spending less on other municipal services.	My municipality should invest in new police officers and vehicles to increase police presence in my neighbourhood, even if it means spending less on other municipal services.	Services	Safety
5	parksrec	Municipalities should spend more on parks and recreation, even if it means increased municipal taxes.	My municipality should spend more on parks and recreation in my neighbourhood, even if it means increased municipal taxes.	Taxes	Parks and Culture

Table 1: Survey Items (*continued*)

Item	Variable	General	Proximate	Tradeoff	Domain
6	waste	Municipalities should increase the frequency of waste collection, even if it means less spending on other municipal services.	My municipality should increase the frequency of waste collection in my neighbourhood, even if it means less spending on other municipal services.	Services	Physical Services
7	artsculture	Municipalities should increase support for cultural and community events, even if it means increased municipal taxes.	My municipality should increase support for cultural and community events in my neighbourhood, even if it means increased municipal taxes.	Taxes	Parks and Culture
8	homeless	Municipalities should support the construction of shelter facilities for homeless individuals, even if it means increased municipal taxes.	My municipality should support the construction of a shelter facility in my neighbourhood for homeless individuals, even if it means increased municipal taxes.	Taxes	Social Service
9	playground	Municipalities should build new playground facilities, even if it means increased municipal taxes.	My municipality should build a new playground facility my neighbourhood, even if it means increased municipal taxes.	Taxes	Parks and Culture
10	library	Municipalities should invest in public library facilities, even if it means less spending on other municipal services.	My municipality should invest in public library facilities in my neighbourhood, even if it means less spending on other municipal services.	Services	Parks and Culture
11	apartment	Municipalities should support the construction of mid-rise apartment buildings to increase housing supply.	My municipality should support the construction of mid-rise apartment buildings in my neighbourhood to increase housing supply.	None	Housing
12	roadrepair	Municipalities should invest more in maintaining and repairing roads, even if it means increased taxes.	My municipality should invest more in maintaining and repairing the roads in my neighbourhood, even if it means increased taxes.	Taxes	Transport

Table 1: Survey Items (*continued*)

Item	Variable	General	Proximate	Tradeoff	Domain
13	roadwiden	Municipalities should upgrade and widen roads to reduce congestion, even if it means increased taxes.	My municipality should upgrade and widen roads in my neighbourhood to reduce congestion, even if it means increased taxes.	Taxes	Transport
14	safeinjection	Municipalities should support the opening of safe injection sites for drug users.	My municipality should support the opening of a safe injection site for drug users in my neighbourhood.	None	Social Service
15	speed_down	Municipalities should reduce speed limits in residential areas, even if it increases commute times.	My municipality should reduce speed limits in residential areas in my neighbourhood, even if it increases commute times.	Other	Transport
16	bikelanes	Municipalities should build more bike lanes, even if it means slightly increased commuting times for drivers.	My municipality should build more bike lanes in my neighbourhood, even if it means slightly increased commuting times for drivers.	Other	Transport
17	immrefugee	Municipalities should invest in immigrant and refugee welcome facilities.	My municipality should invest in an immigrant and refugee welcome facility in my neighbourhood.	None	Social Service
18	lowincome	Municipalities should fund one-stop service centres for low-income families, even if it means increased taxes.	My municipality should fund a one-stop service centre in my neighbourhood for low-income families, even if it means increased taxes.	Taxes	Social Service
19	housingbuild	Municipalities should loosen zoning restrictions to encourage more housing construction.	My municipality should loosen zoning restrictions to encourage more housing construction in my neighbourhood.	None	Housing
20	trees	Municipalities should put more resources into tree maintenance, even if it means increased taxes.	My municipality should focus put more resources into tree maintenance in my neighbourhood, even if it means increased taxes.	Taxes	Parks and Culture

Table 1: Survey Items (*continued*)

Item	Variable	General	Proximate	Tradeoff	Domain
21	fire	Municipalities should invest in new firefighters and fire equipment to improve service response times, even if it means increased taxes.	My municipality should invest in new firefighters and fire equipment to improve service response times in my neighbourhood, even if it means increased taxes.	Taxes	Safety
22	commerce	Municipalities should simplify planning regulations to make it easier to build commercial buildings.	My municipality should simplify planning regulations to make it easier to build commercial buildings in my neighbourhood.	None	Housing
23	snow	Municipalities should improve snow removal services, even if it means increased taxes.	My municipality should improve snow removal services in my neighbourhood, even if it means increased taxes.	Taxes	Physical Services
24	devtcharges	Municipalities should reduce fees charged to property developers, even if it reduced funds for municipal services.	My municipality should reduce fees charged to property developers in my neighbourhood, even if it reduced funds for municipal services.	Services	Housing
25	antiracism	Municipalities should change the names of streets or public facilities that commemorate historical figures who were prejudiced or racist.	My municipality should change the names of streets or public facilities in my neighbourhood that commemorate historical figures who were prejudiced or racist.	None	Social Service
26	womenshelter	Municipalities should support the operation of residential facilities for women escaping abusive relationships, even if it means increased taxes.	My municipality should support the operation of a residential facility in my neighbourhood for women escaping abusive relationships, even if it means increased taxes.	Taxes	Social Service

Table 1: Survey Items (*continued*)

Item	Variable	General	Proximate	Tradeoff	Domain
27	coops	Municipalities should encourage the development of more co-op housing.	My municipality should encourage the development of more co-op housing in my neighbourhood.	None	Housing
28	trafficcam	Municipalities should invest in red light cameras to improve traffic safety, even if it means increased taxes.	My municipality should invest in red light cameras to improve traffic safety in my neighbourhood, even if it means increased taxes.	Taxes	Safety
29	proptheft	Municipalities should give police more resources to prosecute property theft, even if it means increased taxes.	My municipality should give police more resources to prosecute property theft in my neighbourhood, even if it means increased taxes.	Taxes	Safety
30	renters	Municipalities should increase resources to support the legal rights and interests of renters, even if it means increased taxes.	My municipality should increase resources to support the legal rights and interests of renters, even if it means increased taxes.	Taxes	Housing
31	securitycam	Municipalities should install more security cameras for safety, even if it means reduced privacy in public areas.	My municipality should install more security cameras for safety in my neighbourhood, even if it means reduced privacy in public areas.	Other	Safety
32	speed_up	To reduce congestion, municipalities should increase speed limits, even if it means reduced safety for pedestrians.	To reduce congestion, my municipality should increase speed limits in my neighbourhood, even if it means reduced safety for pedestrians	Other	Transport
33	carshare	Municipalities should promote car-sharing programs, even if it means reducing public parking spaces.	My municipality should promote car-sharing programs in my neighborhood, even if it means reducing public parking spaces.	Other	Transport

Table 1: Survey Items (*continued*)

Item	Variable	General	Proximate	Tradeoff	Domain
34	affhousing	Municipalities should support more affordable housing projects, even if it means increased housing density.	My municipality should support more affordable housing projects in my neighborhood, even if it means increased housing density.	Other	Housing
35	transit	Municipalities should improve public transportation services, even if it means less spending on other municipal services.	My municipality should improve public transportation services in my neighborhood, even if it means less spending on other municipal services.	Services	Transport
36	wildlife	Municipalities should preserve natural areas, even if it means limiting new housing construction.	My municipality should preserve natural areas in my neighbourhood, even if it means limiting new housing construction.	Other	Parks and Culture
37	evcharging	Municipalities should install electric vehicle charging stations at libraries, arenas, parks, and other municipal facilities.	My municipality should install electric vehicle charging stations at libraries, arenas, parks, and other municipal facilities in my neighbourhood.	None	Transport
38	carfree	Municipalities should introduce more car-free zones, even if it means making traffic routes longer for some drivers.	My municipality should introduce more car-free zones in my neighborhood, even if it means making traffic routes longer for some drivers.	Other	Transport
39	energyefficient	Municipalities should promote energy-efficient buildings, even if it means imposing stricter building regulations.	My municipality should promote energy-efficient buildings in my neighborhood, even if it means imposing stricter building regulations.	Other	Housing

Table 1: Survey Items (*continued*)

Item	Variable	General	Proximate	Tradeoff	Domain
40	walkable	Municipalities should prioritize walkability in local planning and design, even if it means reducing on-street parking availability.	My municipality should prioritize walkability in local planning and design in my neighborhood, even if it means reducing on-street parking availability.	Other	Transport

Main Predictor: Ideology

We measure respondent ideology using a standard 0-10 ideological self-placement scale. This measurement approach is common in past studies of ideology and municipal policy. A latent measure of policy ideology, constructed from citizens' policy attitudes, would risk tautology in this analysis.

Treatment: General vs. Local Framing

Our treatment variable is the framing of a policy issue statement as "general" or "local." The difference between the two statements is visible in Table 1. Near the beginning of the survey, each respondent will answer five randomly selected questions from the "general" column in Table 1. Near the end of the survey, each respondent will answer five randomly selected questions from the "local" column. This procedure will generate a total of 60,000 responses: approximately 1,500 responses for each row in Table 1. If we (conservatively) assume a high rate of 10% "Don't Know" responses, this produces 1,350 responses per item, and 675 responses per group (local vs. general).

Heterogeneity: Allocational Desirability

We hypothesize above that the dampening effect of our treatment variable on the ideology-issue attitude relationship will be conditional on the allocational "desirability" of the issue statement. While we developed items that we expect to vary widely in desirability, we would like to have an empirical measure of citizens' perceptions of an item's allocational desirability. To accomplish this, we will pull 500 respondents from the main study, each of whom will answer ten questions about allocational desirability rather than the issue position questions. This will produce 125 responses for each question, from which we will

calculate an average “desirability” score for each of the 40 items. Our question wording for this item is as follows:

- We would like to understand what kinds of municipal investments are desirable for a local neighbourhood, and which kinds of investments are more challenging for local neighbourhoods. For each of these proposals, please tell us if you think they are **desirable or undesirable** for a local neighbourhood. Remember, **we do not need to know if you personally support the proposal**. Instead, we want to know if you think these investments tend to be beneficial for the people who live near where they are located.

We will construct a simple weighted mean estimate of allocational harm/benefit for each of the 40 items and use this mean estimate in our heterogeneity test.

Pre-Treatment Covariates

We will include the following pre-treatment covariates in all models:

- The respondent’s *gender identity* (woman = 1; others = 0);
- The respondent’s *age* in years;
- The respondent’s *community type* (urban/suburban);
- The respondent’s *housing tenure* (owner / renter / other);
- The respondent’s *educational attainment*
- The respondent’s *municipal (logged) population size*
- A fixed effect for the respondent’s *region*

We include these pre-treatment covariates to increase the model’s power to detect treatment effects (and treatment effect heterogeneity). These variables are causally “upstream” from the treatment variable and are likely to be related to citizens’ attitudes on our policy questions.

Models and Robustness Tests

Treatment Effect: OLS Models

Our main hypothesis is that the relationship between ideology and policy attitudes is dampened when an issue is “close to home.” This hypothesis necessitates the following model for each of the 40 policy items j :

$$y_{ij} = \alpha_j + \beta_{1j}\text{Ideology}_i + \beta_{2j}\text{Treatment}_{ij} + \beta_{3j}\text{Ideology}_i \times \text{Treatment}_{ij} + \theta_j\mathbf{x}_i + \epsilon_{ij} \quad (1)$$

Where y_{ij} is respondent i 's response to policy item j , β_{3j} is the coefficient of interest for each policy attitude, and \mathbf{x}_i is a vector of pretreatment covariates which may be related to citizens' policy attitudes and ideology: age, gender, education level, municipal population size, and a region fixed effect. θ_j represents the effect of these pre-treatment variables on the each policy attitude. We expect that the coefficient for β_{3j} to have a sign opposite of β_{1j} . We anticipate a large available sample size for each issue (≈ 1350 responses for each of the 40 issues), allowing us to fit this model separately for each policy issue j and plot the resulting β_{3j} coefficients.

Heterogeneity: OLS Models

As an exploratory hypotheses, we noted above that heterogeneity in the interaction effect β_{3j} may in part be a function of the desirability of the policy proposal under consideration. Given our available sample size, we believe the simplest approach to exploring this possibility is simply to specify an issue-level model while propagating uncertainty in the outcome variable (the size of the interaction terms) through the second model using the process described below. Since the dampening effect could be positive or negative depending on the sign of β_{1j} , we define:

$$\beta_{3j}^* = \begin{cases} \beta_{1j} \geq 0, & \beta_{3j} \\ \beta_{1j} < 0, & -\beta_{3j} \end{cases}$$

Here, negative numbers indicate a dampening effect, positive numbers indicate an enhancing effect.

1. For each of the 40 issue-specific models from “Main Model” (equation 1) above, draw 2500 values of β_{3j}^* from the posterior distribution of each model: $\mathbf{b}_{3j} \sim N(\beta_{3j}^*, V(\beta_{3j}))$.

2. For each of the $i = 1, \dots, 2500$ posterior draws of \mathbf{b}_{3j} , we estimate the model $b_{3ji} = \alpha_{0i} + \alpha_{1i}\text{Desirability}_j + \epsilon_{ji}$.
3. For each of the 2500 models described above, we define $\alpha_i = [\alpha_{0i}, \alpha_{1i}]$ with variance-covariance matrix $V(\alpha_i)$. For each model, we draw $\mathbf{a}_i \sim N_2(\alpha_i, V(\alpha_i))$.
4. Finally, we summarise the 2500 values of \mathbf{a}_i calculating the 2.5th, 50th, and 97.5th percentiles of the draws in step 3.

The resulting summary of the \mathbf{a}_i coefficients will provide a test of the linear relationship between our interaction term and allocational desirability. We will also visually explore a nonlinear relationship using a Generalized Additive Model.

Treatment Effect: Multilevel Model

We expect that our research design is sufficiently well-powered to detect moderate to large interaction effects in the OLS setup (see “Statistical Power” below). It is possible, however, that our main approach will indicate interaction effects that are too small to detect reliably using a fully disaggregated estimation strategy. Thus, as a robustness test for the main model and as an alternative approach to measuring our interaction term if the main approach proves to be underpowered, we will fit a second multilevel model as follows:

$$\begin{aligned}
 y_{ij} &= \alpha_i + \beta_{0j} + \beta_{1j}\text{Ideology}_{ij} + \beta_{2j}\text{Treatment}_{ij} + \beta_{3j}\text{Ideology}_{ij} \times \text{Treatment}_{ij} + \epsilon_{ij} \quad (2) \\
 \alpha_i &= \delta_{00} + \delta_{01}\mathbf{x}_i + \psi_i \\
 \beta_{0j} &= \gamma_{00} + \nu_{0j} \\
 \beta_{1j} &= \gamma_{10} + \nu_{1j} \\
 \beta_{2j} &= \gamma_{20} + \nu_{2j} \\
 \beta_{3j} &= \gamma_{30} + \nu_{3j}
 \end{aligned}$$

Where α_i represents the effect of individual level variables, β_{0j} is the policy-specific intercept and β_{1j}, β_{2j} and β_{3j} are the policy-specific effects of ideology, the treatment and the interaction. δ_{00} is the average intercept across the individuals and γ_{00} is the average intercept across the policies. γ_{10}, γ_{20} and γ_{30} are the average coefficients for ideology, the treatment and the interaction. δ_{01} is a vector of coefficients relating the individual covariates to the response. ψ_i and the ν terms are idiosyncratic normally distributed errors at the individual and policy levels, respectively. The ν terms are assumed to come from a

multivariate normal distribution. Not only will this model allow us to estimate and plot the variance in treatment effects for each issue ($\beta_{2j} + \beta_{3j}\text{Ideology}$) as a robustness test of the estimates in the first models, but also to easily estimate an *overall* treatment effect across all issues, $\gamma_{20} + \gamma_{30}\text{Ideology}$.

We will fit this second model in a fully Bayesian framework, to enable straightforward calculation of all the effects described above with uncertainty from the posterior draws of the model. We note that we are not entirely certain as to the computational requirements of this second model; should this approach prove computationally intractable, we will rely entirely on the OLS approach.

Statistical Power

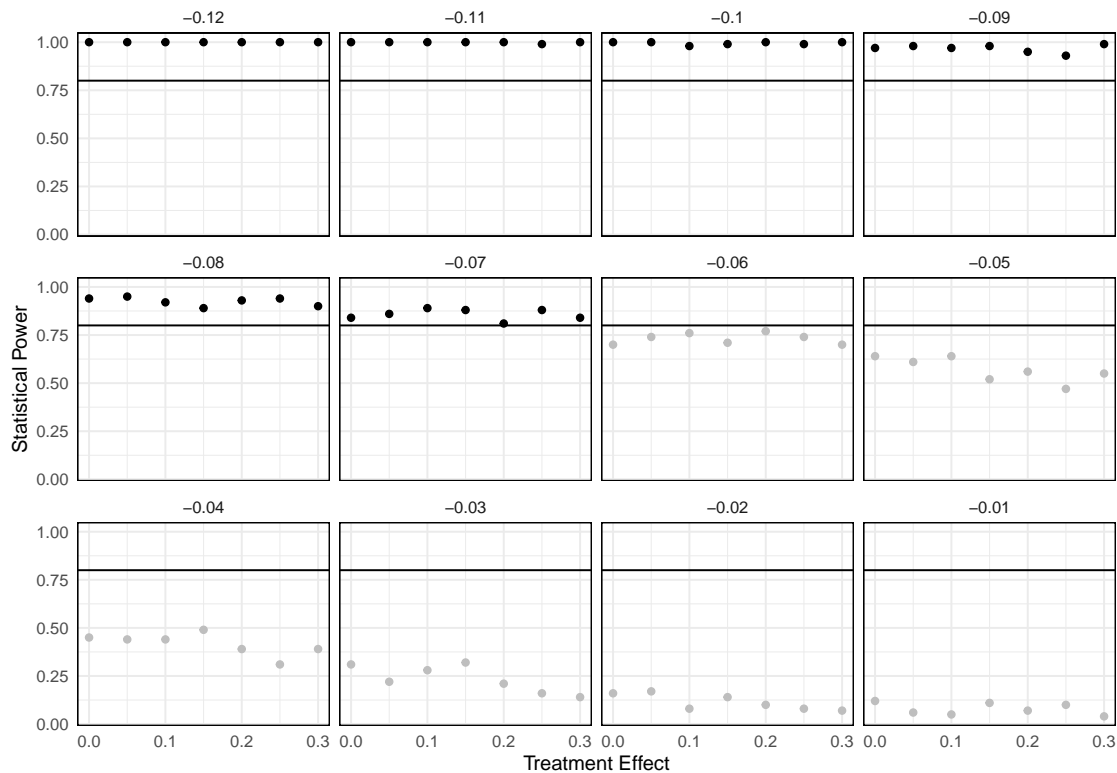


Figure 1: **Power Test.** Proportion of simulation models detecting a true effect by interaction effect (β_3) size (panels) and treatment effect (β_2) size. Dark horizontal line is 80% power. Black circles are above the 80% line and grey circles are below the line.

With 60,000 survey responses across 40 policy issues, the multilevel model specified above will be well-equipped to provide an estimate of the magnitude and variance of the interaction term in the model. However, one might be more concerned about the statisti-

cal power of the OLS model in equation (1). To test this question, we carried out a simple simulation to test the circumstances in which our model could correctly detect a statistically significant interaction term β_3 , conditional on variation in the size of the treatment effect β_2 as well. For the purposes of this simulation we set the error in the model to be similar to a true bivariate relationship between ideology and issue preferences ($R^2 \sim 0.05$) and set the value of β_1 to 0.12, the mean value of β_1 in a past survey of five similar policy attitude questions. Sample size in the simulation model is similar to what we expect to have in each issue model (1,500).

Figure 1 summarizes the results of this test. We find that the model is able to pick up true interaction effects down to $\beta_3 = -0.07$, regardless of the size of β_2 . The model is slightly underpowered at $\beta_3 = -0.06$ and then quite underpowered beyond that point. This means that the model is equipped to detect interaction effects of about half the size of the “main” ideology effect (or, in other words, that the model can detect instances in which the treatment effect dampens the ideology effect by roughly half). Should we find that the results from our OLS models are not consistent with those of our multilevel model, we will repeat this simulation using observed values of β_1 and β_2 , to test whether the difference between the OLS models and the multilevel model is likely to be due to power considerations. In short, if the estimated overall β_3 in the multilevel is much smaller than -0.07 , our simulation suggests that the main model may not be sufficiently powered to detect it. In this case, we will rely entirely on the multilevel model specified above.

Project Timeline

- 2025 (February): Post pre-analysis plan on OSF.
- 2025 (February-March): Survey data collection.
- 2025 (March): End of pre-analysis plan embargo.
- 2025 (April-June): Data analysis and preliminary results.
- 2025 (July-September): First draft of writeup.

References

- Anzia, Sarah F. 2022. *Local Interests: Politics, Policy, and Interest Groups in US City Governments*. Chicago: University of Chicago Press.
- Borwein, Sophie and Jack Lucas. 2023. "Municipal Identity and City Interests." *Political Behavior* 45(3):831–853.
- Boudreau, Cheryl, Christopher S. Elmendorf and Scott A. MacKenzie. 2015. "Lost in Space? Information Shortcuts, Spatial Voting, and Local Government Representation." *Political Research Quarterly* 68(4):843–855.
- Bucchianeri, Peter, Riley Carney, Ryan Enos, Amy Lakeman and Gabrielle Malina. 2021. "What Explains Local Policy Cleavages? Examining the Policy Preferences of Public Officials at the Municipal Level." *Social Science Quarterly* 102(6):2572–2760.
- Doberstein, Carey, Ross Hickey and Eric Li. 2016. "Nudging NIMBY: Do positive messages regarding the benefits of increased housing density influence resident stated housing development preferences?" *Land Use Policy* 54:276–289.
- Doherty, David, Dana Garbarski and Sasha Shapsis. 2024. "NIMBY Syndrome and Abortion Access." *American Politics Research* .
- Egner, Björn. 2016. How Parties Shape Their Manifestos to Obtain Votes. In *Policy Making at the Second Tier of Local Government in Europe*, ed. Xavier Bertrana, Björn Egner and Hubert Heinelt. pp. 179–198.
- Einstein, Katherine Levine and David M. Glick. 2018. "Mayors, Partisanship, and Redistribution: Evidence Directly from U.S. Mayors." *Urban Affairs Review* 54(1):74–106.
- Einstein, Katherine Levine, David M. Glick and Maxwell Palmer. 2019. *Neighborhood Defenders: Participatory Politics and America's Housing Crisis*. Cambridge: Cambridge University Press.
- Einstein, Katherine Levine and Vladimir Kogan. 2016. "Pushing the City Limits: Policy Responsiveness in Municipal Government." *Urban Affairs Review* 52(1):3–32. <http://journals.sagepub.com/doi/10.1177/1078087414568027>.
- Fischel, William A. 2005. *The Homevoter Hypothesis*. Cambridge: Harvard University Press.

- Fowler, Anthony, Seth J. Hill, Jeffrey B. Lewis, Chris Tausanovitch, Lynn Vavreck and Christopher Warshaw. 2023. "Moderates." *American Political Science Review* 117(2):643–660. https://www.cambridge.org/core/product/identifier/S0003055422000818/type/journal_article.
- Hankinson, Michael. 2018. "When Do Renters Behave Like Homeowners? High Rent, Price Anxiety, and NIMBYism." *American Political Science Review* 112:473–493.
- Holman, Mirya R. and J. Celeste Lay. 2021. "Are You Picking Up What I Am Laying Down? Ideology in Low-Information Elections." *Urban Affairs Review* 57(2):315–341.
- Kahneman, Daniel, Jack L Knetsch and Richard H Thaler. 1991. "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias." *Journal of Economic Perspectives* 5:193–206.
- Lucas, Jack. 2024. *Ideology in Canadian Municipal Politics*. Toronto: University of Toronto Press.
- Lucas, Jack and R. Michael McGregor. 2021. Conclusion. In *Big City Elections in Canada*, ed. Jack Lucas and R. Michael McGregor. Toronto: University of Toronto Press pp. 213–229.
- Lucas, Jack, R. Michael McGregor and Aengus Bridgman. 2023. "Spatial Voting in Non-Partisan Cities: A Case Study." *Electoral Studies* 82:102599.
- Marble, William and Clayton Nall. 2021. "Where Self-Interest Trumps Ideology: Liberal Homeowners and Local Opposition to Housing Development." *The Journal of Politics* 83:1747–1763.
- Nelson, Hal T., Brian Swanson and Nicholas L. Cain. 2018. "Close and Connected: The Effects of Proximity and Social Ties on Citizen Opposition to Electricity Transmission Lines." *Environment and Behavior* 50:567–596.
- O'Grady, Tom. 2020. "NIMBYism as Place-Protective Action: The Politics of Housebuilding."
- Otjes, Simon. 2024. "Local political space: Localism, the left-right dimension and anti-elitism." *Party Politics* 30:662–677.
- Peterson, Paul. 1981. *City Limits*. Chicago: University of Chicago Press.

- Reuse, Raf. 2024. "Does the Left–Right Cleavage Matter in Local Politics? An Analysis of Local Party Manifestos across Municipal Sizes." *Swiss Political Science Review* p. spsr.12639. <https://onlinelibrary.wiley.com/doi/10.1111/spsr.12639>.
- Rozin, Paul and Edward B. Royzman. 2001. "Negativity Bias, Negativity Dominance, and Contagion." *Personality and Social Psychology Review* 5:296–320.
- Sances, Michael W. 2018. "Ideology and Vote Choice in U.S. Mayoral Elections: Evidence from Facebook Surveys." *Political Behavior* 40(3):737–762.
- Stone, Clarence N. 1989. *Regime Politics: Governing Atlanta 1946-1988*. Lawrence: Kansas University Press.
- Stone, Clarence N. 1993. "Urban Regimes and the Capacity to Govern: A Political Economy Approach." *Journal of Urban Affairs* 15(1):1–28.
- Tausanovitch, Chris and Christopher Warshaw. 2014. "Representation in Municipal Government." *American Political Science Review* 108(03):605–641.
- Trope, Yaacov and Nira Liberman. 2010. "Construal-Level Theory of Psychological Distance." *Psychological Review* 117(2):440–463. <https://doi.apa.org/doi/10.1037/a0018963>.
- van Prooijen, Jan Willem and André P.M. Krouwel. 2019. "Psychological Features of Extreme Political Ideologies." *Current Directions in Psychological Science* 28(2):159–163.